

**Meeting of the Central Valley Flood Protection Board
June 20, 2008**

**Draft Staff Report
DWR Floodway Protection Section**

Item

Consider approval of Permit No. 18242 to widen the existing bridge across Canal Creek on Avenue One in Merced County.

Applicant

City of Atwater

Location

The project is located in northeastern Atwater, west of State Route 59 and approximately 0.5 miles north of State Route 99 where Avenue One crosses Canal Creek in Merced County (see Attachment B).

Description

To widen existing bridge across Canal Creek with an 80-foot-wide, 52-foot-long reinforced concrete slab, supported by two abutments and a bent with 12, 1' 4"-diameter reinforced concrete piles on Avenue One.

Agency Comments and Endorsements

- The U. S. Army Corps of Engineers has sent a letter stating that the District Engineer has no comments or recommendations regarding flood control because this proposed work does not affect a federally constructed project (Exhibit A).
- Canal Creek is a regulated stream outside of the federal flood control project without any levee maintaining agency.

CEQA Compliance

Board staff, as a Responsible Agency, has reviewed the Initial Study and Mitigated Negative Declaration (MND) for the City of Atwater's Avenue One Bridge Widening

Project (SCN 2007091005), prepared by the lead agency, the City of Atwater, September 2007. The Environmental Review Committee found the CEQA analysis and documentation to be satisfactory. In the Mitigated Negative D the City found that although the proposed project could have significant environmental impacts there will be no significant impacts in this case because the City of Atwater has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to reduce the level of significance to less than significant after mitigation. These mitigation measures are described in the Initial Study / MND and address impacts to animal and plant species, disturbance to unknown cultural resources, and construction related noise.

Board staff concurs with the City's findings.

Hydraulic Impacts

Canal Creek serves as a regional drainage channel, capturing runoff from unimproved adjacent farmlands both upstream and downstream of the project area. The orientation of bridge pile extensions will be constructed parallel to the flow direction to avoid impeding or redirecting flows. This impact is classified as less than significant.

The MND also states that according to the FEMA Flood Insurance Rate Map for the eastern Atwater area, Canal Creek is designated an AE (1% annual chance of flooding) flood zone. The MND further states that no housing is involved in the proposed project, and therefore claims no impacts are associated with bridge construction.

Section 8610.5 Compliance

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

This project has no effects on the State Plan of Flood Control.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

None.

Staff Recommendation

Staff recommends that the Board adopt the CEQA findings and approve the permit.

List of Attachments

- A. Draft Permit
- B. Location Map and Photos

DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18242 BD

This Permit is issued to:

City of Atwater
750 Bellevue Drive
Atwater, California 95301

To widen existing bridge across Canal Creek with an 80-foot-wide, 52-foot-long reinforced concrete slab, supported by two abutments and a bent with 12, 1' 4"-diameter reinforced concrete piles on Avenue One. The project is located in Atwater, west of Highway 59 and north of Highway 99 (Section 8, T7S, R13E, MDB&M, Canal Creek, Merced County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and the Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of the Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 day's notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by the Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of the Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18242 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

FIFTEEN: The permittee shall contact the Department of Water Resources by telephone, (916) 574-1213, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

SIXTEEN: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board. A professional engineer registered in the State of California shall certify that all work was inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

SEVENTEEN: The Central Valley Flood Protection Board and Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

EIGHTEEN: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood

control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

NINETEEN: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

TWENTY: The permittee shall be responsible for repair of any damages to the Canal Creek project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY-ONE: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend and hold harmless the State of California, or any departments thereof, from any liability or claims of liability associated therewith.

TWENTY-TWO: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

TWENTY-THREE: Upon completion of the project, the permittee shall submit as-built drawings to: Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite LL30, Sacramento, California 95821.

TWENTY-FOUR: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

TWENTY-FIVE: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-SIX: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to April 15.

TWENTY-SEVEN: Imported material shall be used when developing the access ramps, and no cuts shall remain in the levee sections upon completion.

TWENTY-EIGHT: All fill material shall be imported impervious material with 20 percent or more passing the No. 200 sieve, a plasticity index of 8 or more, and a liquid limit of less than 50 and free of lumps or stones exceeding 3 inches in greatest dimension, vegetative matter, or other unsatisfactory material. Fill material shall be compacted in 4- to 6-inch layers to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91.

TWENTY-NINE: Any excavations made in the levee sections or within 10 feet of the levee toes shall be backfilled in 4- to 6-inch layers with impervious material with 20 percent or more passing the No. 200 sieve, a plasticity index of 8 or more, and a liquid limit of less than 50 and free of lumps or stones exceeding 3 inches in greatest dimension, vegetative matter, or other unsatisfactory material. Backfill material shall be compacted in 4- to 6-inch layers to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91.

THIRTY: Fill material shall be placed only within the area indicated on the approved plans.

THIRTY-ONE: The fill surface area shall be graded to direct drainage away from the toes of the levees.

THIRTY-TWO: The proposed access ramps shall be graded to direct all surface drainage away from the levee sections.

THIRTY-THREE: Prior to placement of fill against the levee slopes and within 10 feet of the levee toes, all surface vegetation shall be removed to a depth of 6 inches. Organic soil and roots larger than 1-1/2 inches in diameter shall be removed to a depth of 3 feet.

THIRTY-FOUR: Fill on the levee slopes shall be keyed into the existing levee sections with each lift.

THIRTY-FIVE: Compaction tests by a certified soils laboratory will be required to verify compaction of backfill within the levee sections or within 10 feet of the levee toe.

THIRTY-SIX: The access ramps shall be surfaced with a minimum of 4 inches of compacted, Class 2, aggregate base (Caltrans Specification 26-1.02A).

THIRTY-SEVEN: Aggregate base material shall be compacted to a relative compaction of not less than 95 percent per ASTM Method D1557-91, with a moisture content sufficient to obtain the required compaction.

THIRTY-EIGHT: Drainage from the bridge shall not be discharged onto the levee section or streambank.

THIRTY-NINE: If erosion occurs adjacent to the permitted encroachment(s), the permittee shall repair the eroded areas and place adequate revetment on the affected areas to prevent further erosion.

FORTY: The work area shall be restored to the condition that existed prior to start of work.

FORTY-ONE: Trees, brush, sediment, and other debris shall be kept cleared from the bridge site and disposed of outside the floodway to maintain the design flow capacity and flowage area.

FORTY-TWO: Bridge piers and bents placed within the floodway to support a widened portion of an existing bridge shall be constructed in line with the existing bents and piers.

FORTY-THREE: All debris generated by this project shall be disposed of outside the floodway and off the levee sections.

FORTY-FOUR: If the permitted encroachments result(s) in an adverse hydraulic impact, the permittee shall provide appropriate mitigation measures, to be approved by the Central Valley Flood Protection Board, prior to implementation of mitigation measures.

FORTY-FIVE: The letter from the Department of the Army dated April 8, 2008, attached to this permit as Exhibit A is in reference to this project.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

APR 05 2006

Flood Protection and Navigation Section (18242)

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Ave., Rm. LL40
Sacramento, California 95821

Dear Mr. Punia:

We have reviewed an application for a permit by the City of Atwater (Application Number 18242). These plans include replacing an existing bridge across Canal Creek with an 80-foot wide, 52-foot long reinforced concrete slab supported by two abutments and a bent with 12- 1-foot 4-inch diameter reinforced concrete piles on Avenue One (37.3421°N 120.5708°W NAD83), and constructing a 68-foot wide, 61-foot long, precast, prestressed concrete slab bridge across Canal Creek on Green Sands Avenue (37.3387°N 120.5732°W NAD83). The project is located in Atwater, west of Highway 59 and north of Highway 99 in Merced County, California.

The District Engineer has no comments or recommendations regarding flood control because this proposed work does not affect a federally constructed project.

A Section 10 and/or Section 404 permit may be required. Please advise the applicant to contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Division, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250.

If you have any questions concerning our comments on this permit application, please contact Ms. Paige Caldwell at (916) 557-6903 or Mr. Robert Murakami at (916) 557-6738.

Sincerely,

Meegan G. Nagy, P.E.

Chief, Flood Protection and Navigation Section

Copy Furnished:

Mr. Jeremy Arrich, Chief, Flood Project Integrity and Inspection Branch,
3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821

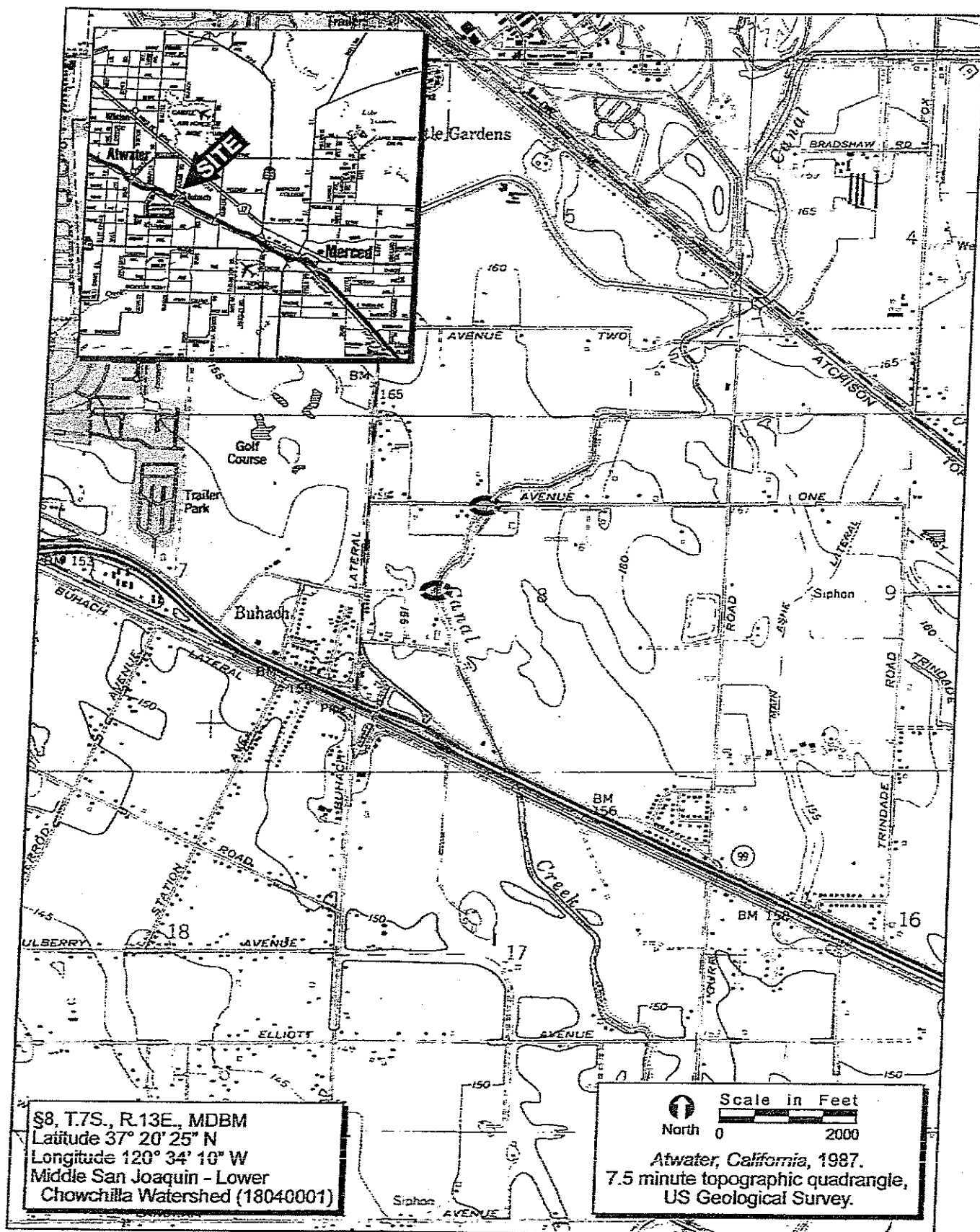


FIGURE 1. Project Site and Vicinity



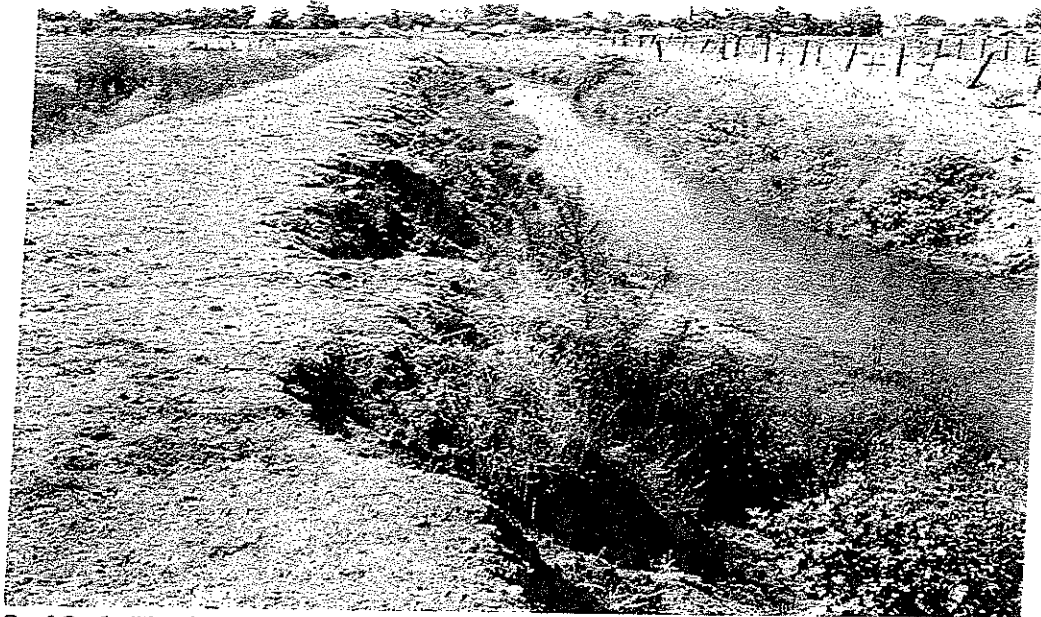
An aerial photograph of a road intersection. A road runs vertically through the center, with a horizontal road crossing it. Several labels are present: '005-432-006' at the top left, '005-432-007' at the top center, '005-432-008' at the top right, '005-432-009' at the top right, '005-432-010' at the top right, '005-432-011' at the top right, '005-432-012' at the top right, '005-432-013' at the top right, '005-432-014' at the top right, '005-432-015' at the top right, '005-432-016' at the top right, '005-432-017' at the top right, '005-432-018' at the top right, '005-432-019' at the top right, '005-432-020' at the top right, '005-432-021' at the top right, '005-432-022' at the top right, '005-432-023' at the top right, '005-432-024' at the top right, '005-432-025' at the top right, '005-432-026' at the top right, '005-432-027' at the top right, '005-432-028' at the top right, '005-432-029' at the top right, '005-432-030' at the top right, '005-432-031' at the top right, '005-432-032' at the top right, '005-432-033' at the top right, '005-432-034' at the top right, '005-432-035' at the top right, '005-432-036' at the top right, '005-432-037' at the top right, '005-432-038' at the top right, '005-432-039' at the top right, '005-432-040' at the top right, '005-432-041' at the top right, '005-432-042' at the top right, '005-432-043' at the top right, '005-432-044' at the top right, '005-432-045' at the top right, '005-432-046' at the top right, '005-432-047' at the top right, '005-432-048' at the top right, '005-432-049' at the top right, '005-432-050' at the top right, '005-432-051' at the top right, '005-432-052' at the top right, '005-432-053' at the top right, '005-432-054' at the top right, '005-432-055' at the top right, '005-432-056' at the top right, '005-432-057' at the top right, '005-432-058' at the top right, '005-432-059' at the top right, '005-432-060' at the top right, '005-432-061' at the top right, '005-432-062' at the top right, '005-432-063' at the top right, '005-432-064' at the top right, '005-432-065' at the top right, '005-432-066' at the top right, '005-432-067' at the top right, '005-432-068' at the top right, '005-432-069' at the top right, '005-432-070' at the top right, '005-432-071' at the top right, '005-432-072' at the top right, '005-432-073' at the top right, '005-432-074' at the top right, '005-432-075' at the top right, '005-432-076' at the top right, '005-432-077' at the top right, '005-432-078' at the top right, '005-432-079' at the top right, '005-432-080' at the top right, '005-432-081' at the top right, '005-432-082' at the top right, '005-432-083' at the top right, '005-432-084' at the top right, '005-432-085' at the top right, '005-432-086' at the top right, '005-432-087' at the top right, '005-432-088' at the top right, '005-432-089' at the top right, '005-432-090' at the top right, '005-432-091' at the top right, '005-432-092' at the top right, '005-432-093' at the top right, '005-432-094' at the top right, '005-432-095' at the top right, '005-432-096' at the top right, '005-432-097' at the top right, '005-432-098' at the top right, '005-432-099' at the top right, '005-432-100' at the top right. Two circles are drawn on the image: one around the intersection of the vertical and horizontal roads, and another around a point further down the vertical road.

Map Projection Information: NAD 83 CA State Plane Zone III (NAD83) feet

1 inch equals 300 feet



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS



Canal Creek - View from Avenue One Bridge - Facing South



Canal Creek - View from Avenue One Bridge - Facing South

FIGURE 5. Site Photos

2005-221 Atwater South